

云南管螺属一新种记述（肺螺亚纲，柄眼目，烟管螺科）

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摘 要 记述采自云南省石林县陆生贝类1新种，即石林管螺 *Phaedusa shilinensis* sp. nov., 文中对新种形态特征、栖息环境进行了描述，并对其相似种进行了分析和讨论。

关键词 肺螺亚纲，柄眼目，烟管螺科，管螺属，新种。

中图分类号 Q959.212

笔者在整理云南省陆生贝类标本时，经鉴定发现烟管螺科 Clausiliidae，管螺属1新种，即石林管螺 *Phaedusa shilinensis* sp. nov., 报道如下。

1 石林管螺，新种 *Phaedusa shilinensis* sp. nov. (图1~7)

正模标本 壳高17.20 mm，壳宽3.24 mm，壳口高3.08 mm，壳口宽2.04 mm，2010年8月9日采自云南省石林县石林。

副模标本 成螺276个，幼螺101个。壳高14.22~18.98 mm，壳宽2.94~3.42 mm，壳口高2.60~3.08 mm，壳口宽1.78~2.16 mm，2010年8月9日采自云南省石林县石林。

正、副模标本均保存在昆明医学院标本馆（昆明）。

形态特征 贝壳小型，左旋，壳质薄，易碎，呈细长纺锤形。有 $14\frac{1}{2}$ 个螺层，前几个螺层增长迅速，略膨胀，螺旋部较高，呈塔形，体螺层增长缓慢，膨大，在其背面有粗的肋纹。壳面呈黄褐色或深褐色，壳皮易脱落，其上并有清晰的生长线和螺纹。壳顶钝，胚螺层光滑，无螺纹，缝合线稍深。壳口小，呈梨形，稍倾斜，口缘厚。在壳口处可见到较小的上板和呈片状的下板，而看不见下轴板。上、下板之间距离较远，弯曲向内盘旋，上板稍粗大，其末端与螺旋板相接。在体螺层右侧面可见1细长的主襞褶和1短的下腭褶，其它襞板未见。闭

板呈小匙状（图6），其顶端圆厚，无缺刻，柄细长。生殖系统具发达的阴茎，阴茎鞘膨大，阴茎背基片比阴茎鞘略细，两者连接处狭窄。阴茎牵引肌牢固附着于阴茎背基片中部背面（图7）。输精管白色，很细且弯曲，末端紧粘于阴茎鞘腹侧末端，与阴茎连通。受精囊黄色，长而厚，末端球形。盲管白色，细长且薄，末端囊状，自受精囊分支后延伸较长。本种系卵胎生，解剖成熟个体时可见完整的幼螺1~2个。

栖息环境 常生活在灌木丛、草丛中，石块、落叶下和土石缝隙中，栖息于潮湿多腐殖质的石灰岩地区，公园附近长满苔藓、地衣的岩石上或缝隙中。

现已知分布于我国云南省。

讨论 管螺属 *Phaedusa* 系 H. & A. Adams, 1855 年建立。特征：贝壳通常较大，呈长纺锤形，壳面具有明显的斜行刻纹，口缘宽阔，上板发达，下板的下端直达壳口唇缘，主襞褶位于壳右侧，无月状襞，有上、下腔襞。闭板常呈宽卵圆形。本属的种类主要分布于东亚、东南亚及印度-澳大利亚地区。

新种与丹巴管螺 *Phaedusa danbanensis* Chen and Zhang, 1999 外形上极为相似，但后者个体较小（壳高15.0 mm，壳宽4.1 mm，壳口高4.0 mm，壳口宽3.1 mm），有 $9\frac{1}{2}$ 螺层，在体螺层右侧面可见到1较长的主襞褶和3条较短的腭褶。与前者有所区别。

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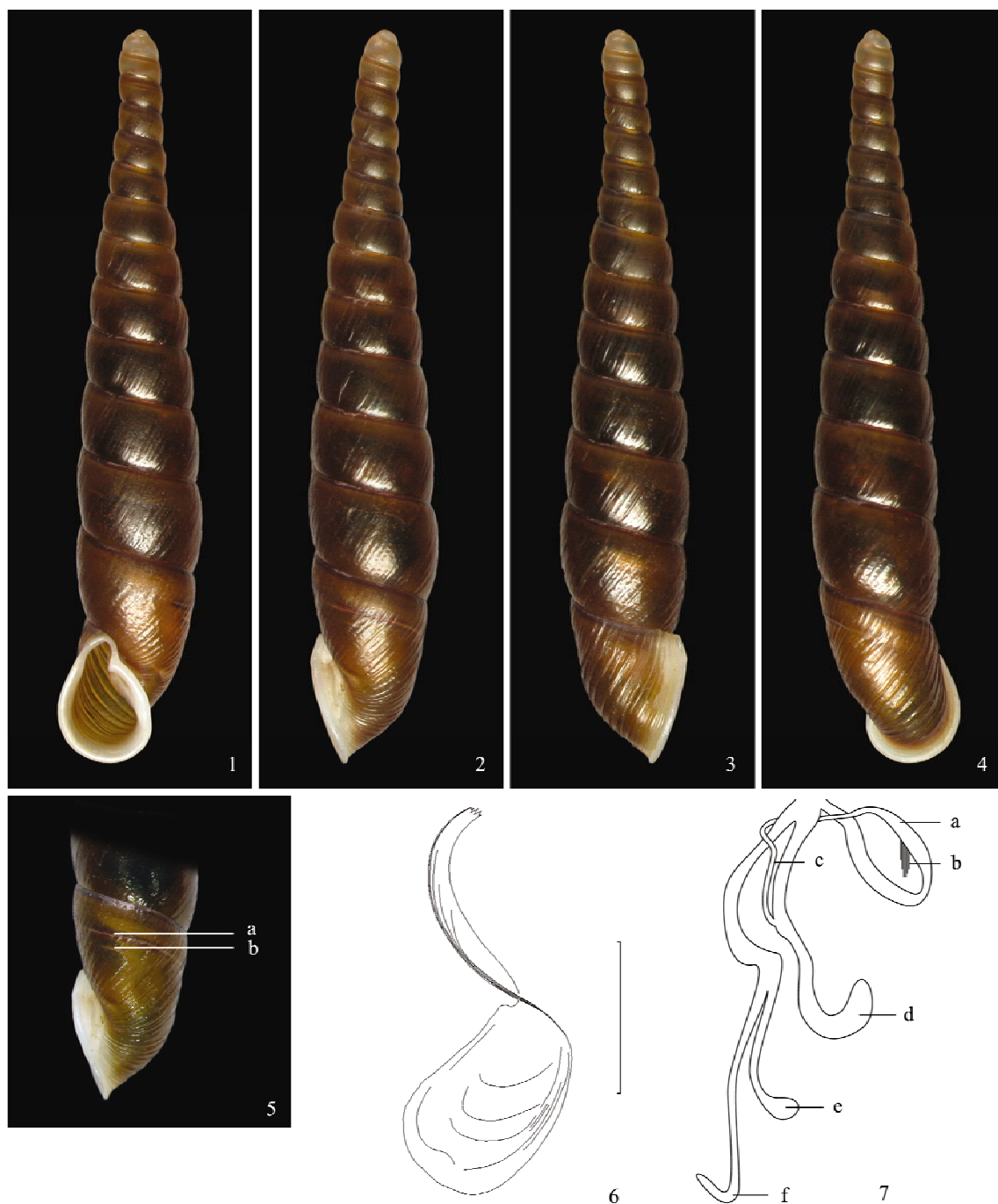


图 1~7 石林管螺, 新种 *Phaedusa shilinensis* sp. nov.

1. 腹面观 (ventral view) 2. 右侧面观 (right lateral view) 3. 左侧面观 (left lateral view) 4. 背面观 (dorsal view) 5. 主襞褶和下腭褶之位置 (location of principal plica & lower palatal plica) 5a. 主襞褶 (principal plica) 5b. 下腭褶 (lower palatal plica) 6. 闭板 (plate of clausilium) 7. 生殖系统 (reproductive system) 7a. 阴茎 (penis) 7b. 阴茎牵引肌 (retractor muscle of penis) 7c. 输精管 (vas deferens) 7d. 两性腺 (hermaphroditic gland) 7e. 受精囊 (spermatheca) 7f. 盲管 (diverticulum) 比例尺 (scale bar) = 1 mm

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A NEW SPECIES OF THE GENUS *PHAEDUSA* FROM YUNNAN (PULMONATA, STYLOMMATOPHORA, CLAUSILIIDAE)

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Abstract In the present paper a new species of land snail is described. The materials were collected by the authors in Shilin County, Yunnan Province, China, Aug. 2010. Type specimens are deposited in the Kunming Medical University, China.

***Phaedusa shilinensis* sp. nov.** (Figs 1–7)

Holotype, alt. 17.20 mm, diam. 3.24 mm, alt. of aperture 3.08 mm, diam. of aperture 2.04 mm, collected from Shilin Town, Shilin County (24°49'N, 103°19'E), Yunnan Province, China, 9 Aug. 2010.

Paratypes, 276 adult specimens, 101 young specimens. alt. 14.22–18.98 mm, diam. 2.94–3.42 mm, alt. of aperture 2.60–3.08 mm, diam. of aperture 1.78–2.16 mm, same data as holotype.

Shell small, sinistral, thin, fragile, slender, fusiform. Whorls $14\frac{1}{2}$, moderately convex with high

spiral part, pagoda-formed, body whorl expand, and with thick rib-stria on the back of body whorl. Shell yellowish brown or dark brown in colour, surface with very distinct spiral line and growth line; protoconch smooth, without spiral line. Apex blunt, suture slightly deep. Aperture small, pear-shaped, peristome thick. Superior lamella small, inferior lamella large, both lamellae visible in aperture, and both lamella distance very far, and the superior lamella thick continues into spiral lamella. The principal plica long and thin and with 1 short lower palatal plica on

the right side of the last whorl; other plicae and lamellae is not visible. The clausilium soup spoon-formed, thick, without a small gap on the front; pedicle long and thin. Reproductive system: penis well developed, penial sheath thick, Epiphallus slender than penial sheath, becomes short narrow at the junction between penial sheath and epiphallus; retractor muscle of penis firmly attached to middle of posterior part of penial epiphallus; vas deferens rather slender, tortuous and whitish, firmly attached to proximal end of penial sheath, and communicated with epiphallus; spermatheca yellowish, long, thick and globular; diverticulum whitish, very long, slender, and thin, extends further than spermatheca after branching out from spermatheca; the new species ovoviviparous, with 1–2 junior found in some mature snails.

The new species closely resembles *Phaedusa danbanensis* Chen and Zhang, 1999 in general structure. The new species shell is big (alt. 17.20 mm, diam. 3.24 mm, alt. of aperture 3.08 mm, diam. of aperture 2.04 mm), with $14\frac{1}{2}$ whorls. The latter shell is small (alt. 15.0 mm, diam. 4.1 mm, alt. of aperture 4.0 mm, diam. of aperture 3.1 mm), with $9\frac{1}{2}$ whorls, with 1 long principal plica and 3 short plicae.

Key words Pulmonata, Stylommatophora, Clausiliidae, *Phaedusa*, new species.

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